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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10:015,565 | 12/17/2001 | Katsuhide Yajima | Q67755 | 6231 |

7590 08/29/2003

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EXAMINER

ADDISON, KAREN B

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 08/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,565

Applicant(s)

YAJIMA ET AL.

Examiner

Karen B Addison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA and further in view of Yamamoto (5121,017) and Fukasaku (6404086).

APA discloses in fig.2 a motor comprising: a rotor (1), a rotary shaft (11) inserted and fixed into the rotor; stack stator cores (7a, 7b), each constituting a stator core comprising inner yoke (9) and outer yoke (8) being integrated by a coil bobbin and opposed to the rotor; an output side bearing (4b) provided on the output side of rotary shaft, and supporting a portion near an output portion of the rotary shaft; a opposite side bearing holding portion (3) for holding an opposite side bearing (4a) supporting an opposite side to the output side of the rotary shaft. Wherein, a lead screw (A) is formed at the output portion and a rotation of the lead screw directly affects an operated member. APA also discloses a hole (B) having an inner diameter larger than an outer diameter of the rotor formed in opposite side bearing holder portion(C) wherein, the opposite side bearing supported by the holding portion is configured to move axially towards the output side brought in contact with the output side bearing to thereby be positioned in the axial direction thereof. APA does not disclose the output side bearing and holding portion made of resin and being integrally formed to the stator.

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Yamamoto teaches a motor in fig.2 comprising an output side bearing (25) and the opposite side bearing holding portion (18) made of resin for the purpose of integrally uniting the stator core.

Fukasaku discloses in fig.16 a motor comprising: a rotor (1); a rotary shaft (3) having a narrow portion provide on the out-put side and a resin washer (24) fitted around the narrow portion of the rotary shaft for the purpose of damping vibration. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the motor of APA with the teaching of Yamamoto bearing structure and Fukasaku resin washer for the purpose of integrally uniting the stator core and damping vibrations.

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of Yamamoto (5121017) and Fukasaku (6404086) applied to claims 1-4 above, and further in view of Ohi (5798589).

As seen above APA, Yamamoto and Fukasaku disclose substantially the claim invention. However, neither APA, Yamamoto nor funkasaku teaches a lubricant filled in a gap formed between the lead screw and the output side bearing.

Ohi teaches in fig.1-7 a motor comprising a lubricant filled in a gap (33) formed between the shaft 2 (a functionally equivalent of a lead screw) and the output side bearing (16) for the purpose of improving slidability of the bearing. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the motor of APA with the teaching Yamamoto and Fukasaku resin washer with

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the lubrication system of Ohi for the purpose reducing sliding friction of the bearing and improving the slidability of the bearing.

Referring to claim 1 and 5 the method of forming (eg. Insert molding) the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Response to Arguments

4. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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KBA
August 19, 2003

CH 8/19/03

BSM
BURTON S. MULLINS
PRIMARY EXAMINER